I Claim:

1. A SiC accelerometer comprising a proof mass and an ohmic contact, and said ohmic contact comprises layers of Titanium, Tantalum Disilicide, and Platinum.

2. A SiC accelerometer as claimed in claim 1 further comprising a substrate and a bridge, and wherein said bridge interconnects said proof mass and said substrate.

3. A SiC accelerometer as claimed in claim 2 wherein said bridge includes an n-type SiC epilayer.

4. A method of making a SiC accelerometer from a SiC wafer, said SiC wafer comprising p-type SiC substrate and an n-type SiC epilayer, comprising the steps of:

applying a layer of oxide on said n-type epilayer of said SiC;

applying a first layer of photoresist on said layer of oxide;

masking said first layer of photoresist with ultraviolet light imidizing a portion of said first layer of photoresist and stripping away said imidized photoresist with developer and leaving unimidized photoresist on said layer of oxide;

dry etching exposed oxide;

removing the unimidized first layer of photoresist;

depositing contact metallization;

depositing Aluminum on said contact metallization;

applying a second layer of photoresist on said Aluminum;

masking said second layer of photoresist with ultraviolet light imidizing a portion of said second layer of photoresist and stripping away said imidized portion of said second layer of photoresist with developer and leaving behind unimidized

photoresist;

etching Aluminum not covered by unimidized photoresist;

removing unimidized photoresist;

dry etching said contact metallization not covered by Aluminum;

applying a third layer of photoresist to said Aluminum and said oxide and masking said third layer of photoresist imidizing a portion of said photoresist and stripping away said imidized portion of said photoresist leaving behind unimidized photoresist ;

applying a masking layer selected from the group consisting of Indium Tin Oxide and Nickel over said Aluminum, said oxide and said unimidized photoresist leaving a portion of said unimidized photoresist exposed;

removing said unimidized portion of said third layer of photoresist together with said a portion of said masking layer selected from the group of Indium Tin Oxide and Nickel which covers said unimidized photoresist; and,

dry etching portions of said oxide, said n-type epilayer of said SiC substrate and said p-type SiC substrate which are not protected by said masking layer selected from the group consisting of Indium Tin Oxide and Nickel;

and, dissolving said Aluminum and said masking layer.

5. A method of making a SiC accelerometer as claimed in claim 4 wherein said step of dry etching portions of said oxide, said n-type epilayer of said SiC substrate and said p-type SiC substrate which are not protected by said making layer forms an aperture in said wafer.

6. A method of making a SiC accelerometer from a SiC wafer, said SiC wafer

comprising p-type SiC and an n-type epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal leaving a remainder of said contact metal unprotected;

etching said remainder of said contact metal; and,

etching said n-type SiC epilayer and said p-type SiC.

7. A method of making a SiC accelerometer as claimed in claim 6 wherein said contact metal is comprised of Titanium, Tantalum Silicide and Platinum.

8. A method of making a SiC accelerometer as claimed in claim 6 wherein said step of etching said n-type SiC epilayer and said p-type SiC is performed by deep reactive ion etching.

9. A method of making a SiC accelerometer as claimed in claim 6 wherein said step of etching said n-type SiC epilayer and said p-type SiC forms an aperture therein.

10. A method of making a SiC accelerometer as claimed in claim 6 wherein said step of etching said n-type SiC epilayer and said p-type SiC forms a recess therein.

11. A method of making a sensor from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal; and,

removing said protective metal from said contact metal.

12. A method of making a sensor as claimed in claim 11 wherein said contact metal comprises: Titanium contacting said n-type SiC epilayer, Tantalum Disilicide contacting said Titanium and Platinum contacting said Tantalum Disilicide.

13. A method of making a sensor as claimed in claim 11 wherein said step of etching said remainder of said contact metal is done with a plasma of inert gas.

14. A method of making a sensor as claimed in claim 13 where said inert gas is Argon.

15. A method of making a sensor as claimed in claim 11 wherein said protective metal is Aluminum.

16. A method of making a sensor as claimed in claim 11 wherein the step of removing said protective metal from said contact metal is performed with hot phosphoric acid.

17. A method of making a sensor as claimed in claim 11 further comprising the step of:

etching said p-type SiC from the side opposite said n-type epilayer.

18. A method of making a sensor from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal exposing said n-type epilayer;

applying a second layer of protective material over said protective metal and said n-type epilayer;

removing a portion of said second layer of protective material; and,

etching, by deep reactive ion etching, a three-dimensional recess into said n-type and said

p-type SiC.

19. A method of making a sensor as claimed in claim 18 wherein said step of etching said remainder of said contact metal is performed with an inert gas plasma and where said step of etching a three-dimensional recess into said n-type epilayer and said p-type SiC forms an aperture in said SiC wafer.

20. A method of making a sensor as claimed in claim 19 wherein said aperture extends completely through said SiC wafer.

21. A method of making a sensor as claimed in claim 20 wherein said aperture forms a proof mass useable as an accelerometer.

22. A method of making a sensor as claimed in claim 18 wherein said second protective layer is selected from the group consisting of Indium Tin Oxide and Nickel.

23. A method of simultaneously manufacturing a plurality of multistructural, multifunctional sensors from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type SiC epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal exposing said n-type epilayer;

applying a second layer of protective material over said protective metal and said n-type epilayer;

removing a portion of said second layer of protective material from selected areas of said SiC wafer exposing said n-type epilayer; and,

etching, by deep reactive ion etching, three-dimensional recesses in said exposed areas of said n-type epilayer with said etching continuing into said p-type SiC.

24. A method as claimed in claim 23 wherein said step of depositing contact metal on said n-type layer includes depositing Titanium followed by depositing of Tantalum Silicide followed by Platinum.

25. A method as claimed in claim 23 wherein said step of protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered is performed by depositing Aluminum as the protective metal.

26. A method as claimed in claim 23 wherein said step of etching said remainder of said contact metal exposing said n-type epilayer is performed with an inert gas plasma.

27. A method as claimed in claim 23 wherein said step of applying a second layer of protective material over said protective metal and said n-type epilayer is performed by depositing a protective material selected from the group of Indium Tin Oxide and Nickel.

28. A method as claimed in claim 23 wherein said step of removing a portion of said second layer of protective material from selected areas of said SiC wafer exposing said n-type epilayer is performed by dissolving photoresist underlying said second layer of protective material.

29. A method as claimed in claim 28 wherein said step of etching, by deep reactive ion etching, three-dimensional recesses in said exposed areas of said n-type epilayer with said etching continuing into said p-type SiC forms apertures which extend completely through said SiC wafer.

30. A method of simultaneously manufacturing a plurality of multistructural,

multifunctional sensors from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type SiC epilayer, comprising the steps of:

depositing Titanium metal on said n-type layer;

depositing Tantalum Disilicide on said Titanium metal;

depositing Platinum on said Tantalum Disilicide;

protecting a portion of said metals by covering said Platinum with Aluminum leaving a remainder of said contact metal unprotected and uncovered;

etching, with an inert gas plasma, said remainder of said contact metal exposing said n-type epilayer;

applying a layer of Indium Tin Oxide over said Aluminum and said n-type epilayer to protect said Aluminum and said n-type epilayer;

removing a portion of said Indium Tin Oxide from selected areas of said SiC wafer exposing a portion of said n-type epilayer; and,

etching, by deep reactive ion etching, three-dimensional recesses in said exposed portions of said n-type epilayer with said etching continuing into said p-type SiC.

31. A plurality of multistructural and multifunctional SiC sensors produced by the process of claim 30.

32. A method as claimed in claim 30 further comprising the steps of:

etching a portion of the side of the p-type SiC opposite of said n-type SiC.

33. A method as claimed in claim 30 wherein said etching, by deep reactive ion etching, forms a plurality of accelerometers.

34. A plurality of multistructural and multifunctional SiC sensors produced by the

process of claim 32.

35. A method as claimed in claim 23 further comprising the step of: separating said multistructural, multifunctional sensors apart from each other.

36. A method as claimed in claim 30 further comprising the step of: separating said multistructural, multifunctional sensors apart from each other.

37. A SiC accelerometer produced by the process of claim 4.

38. A SiC accelerometer produced by the process of claim 11.

39. A SiC accelerometer produced by the process of claim 18.

40. A method of making a pressure sensor from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type SiC epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal;

removing said protective metal from said contact metal; and,

etching said p-type SiC opposite said n-type SiC epilayer forming a cavity in said SiC wafer.

41. A method of simultaneously manufacturing a plurality of multistructural, multifunctional sensors from a SiC wafer, said SiC wafer comprising p-type SiC and an n-type SiC epilayer, comprising the steps of:

depositing contact metal on said n-type SiC epilayer;

protecting a portion of said contact metal by covering it with a protective metal leaving a

remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal exposing a portion of said n-type SiC epilayer;

applying a second layer of protective material over said protective metal and said n-type cpilayer;

removing a portion of said second layer of protective material from selected areas of said SiC wafer exposing a portion of said n-type SiC epilayer;

etching, selectively, by deep reactive ion etching, three-dimensional recesses in said exposed areas of said n-type SiC epilayer with said etching continuing into said p-type SiC; and,

etching, selectively, by deep reactive ion etching, three-dimensional recesses in said p-type SiC.

42. A method of simultaneously manufacturing a plurality of multistructural, multifunctional devices from a SiC wafer, said SiC wafer comprising p-type SiC substrate and an n-type SiC epilayer, comprising the steps of:

depositing contact metal on said n-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal exposing said n-type epilayer;

applying a second layer of protective material over said protective metal and said n-type epilayer;

removing a portion of said second layer of protective material from selected areas of said

SiC wafer exposing said n-type epilayer; and,

etching, by deep reactive ion etching, three-dimensional recesses in said exposed areas of said n-type epilayer with said etching continuing into said p-type SiC.

43. A method as claimed in claim 42 wherein said device is a sensor.

44. A device produced by the method of claim 42.

45. An accelerometer comprising a proof mass and an ohmic contact, said ohmic contact comprises layers of Titanium, Tantalum Disilicide, and Platinum, a bridge and a substrate, said bridge interconnects said proof mass and said substrate, said bridge includes an epilayer, and, said substrate is selected from the group of SiC, AlN, BC, and Al_2O_3.

46. An accelerometer as claimed in claim 45 wherein said substrate is n-type.

47. An accelerometer as claimed in claim 45 wherein said substrate is p-type.

48. A method of making a sensor from a SiC wafer, said SiC wafer comprising p-type SiC, comprising the steps of:

depositing contact metal on said p-type layer;

protecting a portion of said contact metal by covering it with a protective metal leaving a remainder of said contact metal unprotected and uncovered;

etching said remainder of said contact metal; and,

removing said protective metal from said contact metal.